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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,592	09/25/2001	Mohan Mark Amaratunga	RD-27933	5198

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GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH
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NISKAYUNA, NY 12309

EXAMINER

BOYCE, ANDRE D

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/682,592	Applicant(s) AMARATUNGA ET AL.	
	Examiner Andre Boyce	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/1/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-75 have been examined.

Claim Objections

2. Claim 1 is objected to because of the following informalities: "A" should be --An-- in line 1. Appropriate correction is required.

Claim 49 is objected to because of the following informalities: "a plurality of energy-consuming systems" has been repeated twice. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 50 and 69 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 50 recites the limitation "the means" in lines 1-3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 69 recites the limitation "the means" in lines 2-3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-75 are rejected under 35 U.S.C. 102(e) as being anticipated by Bartone et al (USPN 6,633,823).

As per claim 1, Bartone et al disclose an energy-consumption predicting system (e.g., system 20 for monitoring and controlling energy usage, column 4, lines 66-67) comprising: means for measuring amounts of energy consumed by at least one of energy-consuming site (i.e., facility 26, figure 1) and energy-consuming systems (e.g., device controller 30 for measuring amount of power consumed); means for determining information regarding an operation of said at least one of energy consuming site and energy-consuming systems (e.g., real-time portfolio load management, column 6, lines 26-27); means for transmitting said amounts and said information to a means for receiving said amounts and said information (e.g., facility transceiver unit 36 communicates data over the network 24 to data center 22, column 5, lines 46-48); means for analyzing and evaluating said amounts and said information to provide analyzed and evaluated data and information (e.g., real-time portfolio load management and load curtailment, column 6, lines 26-27); means for

generating predicted amounts of energy required for the operation of said at least one of energy-consuming site and energy-consuming systems (e.g., energy use predictions based on previous customer data, column 6, lines 42-45); and means for providing access to said analyzed and evaluated data and information and said predicted required amounts of energy (e.g., data center 22 can collect and share data over various networks, including the internet, column 5, lines 3-6).

As per claim 2, Bartone et al disclose wherein in the at least one energy-consuming site comprises at least one energy-consuming system (e.g., power consumption device 28, column 5, lines 17-21).

As per claim 3, Bartone et al disclose a plurality of energy-consuming systems (column 5, lines 37-40).

As per claim 4, Bartone et al disclose comprises a plurality of energy-consuming sites (e.g., plurality of facilities 26, column 5, lines 54-56).

As per claim 5, Bartone et al disclose the energy comprises at least one selected from the group consisting of electricity, natural gas, diesel fuel, gasoline, fuel oil, coal, and combinations thereof (column 5, lines 13-15).

As per claim 6, Bartone et al disclose at least one meter for each type of energy consumed (e.g., electric meter 48, column 10, line 1).

As per claim 7, Bartone et al disclose the at least one meter comprises a meter selected from the group consisting of digital meters, analog meters, mechanical meters, broad-band spectrum modems, process logic control meters, and combinations thereof (e.g., electric meter 48, column 10, line 1).

As per claim 8, Bartone et al disclose a meter disposed in cooperation with at least one delivery line that delivers energy to the energy-consuming site (e.g., transducers placed by main power lines into facility 26, near meter 48, column 9, lines 66-67).

As per claim 9, Bartone et al disclose a meter disposed prior to the energy-consuming site in a position sufficient to measure total energy amounts delivered to the energy consuming site (e.g., allows real-time measurement of total power utilization at the facility 26, column 10, lines 3-5).

As per claim 10, Bartone et al disclose the energy is delivered by a method selected from the group consisting of pipeline, electrical line, delivery vehicles, and combinations thereof (e.g., power line, column 9, lines 66-67).

As per claim 11, Bartone et al disclose a meter disposed prior to each energy-consuming system in the energy-consuming site in a position sufficient to measure energy delivered to each energy-consuming system at the energy-consuming site (e.g., set of transducers 49 placed next to power lines to a sub panel for a specific sub-unit within the facility 26, column 10, lines 1-3).

As per claim 12, Bartone et al disclose communications links between each of the means for measuring, the means for determining, the means for transmitting, the means for receiving, the means for analyzing and evaluating, the means for generating, and the means for providing (e.g., facility transceiver unit 36 communicates data over network 24 to data center 22, column 5, lines 46-48).

As per claim 13, Bartone et al disclose the communications link is selected from the group consisting of phone modem, network connection, communication, radio communication and other wireless communication systems, cellular communication, satellite communication, web access communication, Internet access communication, Intranet access communication, and combinations thereof (e.g., communications network 24, column 5, lines 1-3).

As per claims 14 and 15, Bartone et al disclose at least one data processing module (e.g., data center's 22 data server, column 6, lines 34-36).

As per claim 16, Bartone et al disclose means for providing energy provider information for evaluation and analysis (e.g., real-time statistical analysis and energy use predictions, column 6, lines 42-45).

As per claim 17, Bartone et al disclose the energy-provider information is provided as real-time information (e.g., real-time statistical analysis and energy use predictions, column 6, lines 42-45).

As per claim 18, Bartone et al disclose the energy-provider information is provided in electronic form (e.g., data center's 22 system will initiate commands that will signal power reductions, column 6, lines 45-48).

As per claim 19, Bartone et al disclose at least one of energy unit prices, delivery tariffs, energy taxes, and combinations thereof (i.e., real-time pricing, column 6, lines 45-48).

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As per claim 20, Bartone et al disclose means for providing energy delivery information for evaluation and analysis (e.g., regulated rate tariffs, column 8, lines 37-41).

As per claim 21, Bartone et al disclose means for providing information on at least one of delivery routes, delivery costs, loss costs, tariffs, taxes, transportation costs, and combinations thereof (e.g., regulated rate tariffs, column 8, lines 37-41).

As per claim 22, Bartone et al disclose a computer (e.g., data center's 22 data server, column 6, lines 34-36).

As per claim 23, Bartone et al disclose a means for providing process variable information to the means for analyzing and evaluating the energy amounts consumed and the information (e.g., real-time analysis based on weather reports, column 6, lines 42-45).

As per claim 24, Bartone et al disclose at least one of time, date, temperature, humidity, energy-consuming site location, and other process-influencing variables for the energy-consuming site (e.g., real-time analysis based on weather reports, column 6, lines 42-45).

As per claim 25, Bartone et al disclose means for providing raw material data and information to the means for analyzing and evaluating the energy amounts consumed and the information (i.e., real-time energy use data, column 6, lines 30-33).

As per claim 26, Bartone et al disclose means for providing by-product and waste information to the means for analyzing and evaluating the energy amounts

consumed and the information (e.g., determine potential energy waste and inefficiencies, column 8, lines 3-8).

As per claim 27, Bartone et al disclose means for providing product information to the means for analyzing and evaluating the energy amounts consumed and the information (e.g., state of the power consumption device 28, column 5, lines 21-25).

As per claim 28, Bartone et al disclose at least a means selected from the group consisting of means for acquiring data, means for mining data, and means for analyzing data (e.g., ability to acquire real-time information from remote locations, column 6, lines 11-12).

As per claim 29, Bartone et al disclose data acquisition software, data mining software, data analysis software, and combinations thereof (e.g., software that interprets the acquired data, column 6, lines 13-16).

As per claim 30, Bartone et al disclose at least one means selected from the group consisting of means for purchasing energy, means for predicting energy use trends, means for planning energy-related decisions, means for purchasing energy, means for predicting energy price trends, and combinations thereof (e.g., real-time statistical analysis and energy use predictions, column 6, lines 42-45).

As per claim 31, Bartone et al disclose software (e.g., software that interprets the acquired data, column 6, lines 13-16).

As per claim 32, Bartone et al disclose a web site that is connected to the means for analyzing and evaluating to communicate energy-related information and permits access to the analyzed and evaluated data and information and the predicted

amounts of energy required for said operation (e.g., technicians have ability to receive energy use data via a secured website, column 8, lines 1-3).

As per claim 33, Bartone et al disclose the web site permits a user interaction with at least one of the means for measuring, the means for determining, the means for transmitting, the means for analyzing and evaluating, the means for generating, and the means for providing (e.g., perform detailed energy management assessments and benchmarking, column 8, lines 3-6).

As per claim 34, Bartone et al disclose the web site provides real-time analyzed and evaluated data and information and predicted required amounts of energy (e.g., internet is used to provide real-time use and cost information, column 7, lines 63-66).

As per claim 35, Bartone et al disclose the means for measuring energy amounts delivered comprises at least one meter, the web site is connected to each meter of the means for measuring, and the web site permits access to meter information (e.g., data center 22 receives continuous consumption data via network 40 from facilities meter usage, column 8, lines 58-62).

As per claim 36, Bartone et al disclose at least one data processing module, the web site is connected to each meter of the means for measuring, and the web site permits access to the at least one data processing module (e.g., data center 22 receives continuous consumption data via network 40 from facilities meter usage, column 8, lines 58-62).

As per claim 37, Bartone et al disclose means to provide information on energy consumption for evaluation and analysis, the web site is connected to each meter of

the means for measuring, and the web site permits access to the information on energy consumption (e.g., data center 22 receives continuous consumption data via network 40 from facilities meter usage, column 8, lines 58-62).

As per claim 38, Bartone et al disclose planning tools that can be used to plan at least one of future times for operation of energy-consuming systems at the energy-consuming site, future times to purchase energy, and future amounts of energy that should be purchased, as determined by the energy-consumption predicting system (e.g., prediction analysis to estimate future energy use, column 8, lines 11-14).

As per claim 39, Bartone et al disclose a user interface that allows a user to relate data on amounts of energy consumed to other variables of the energy-consuming site (e.g., data analysis, statistical analysis, and interpolation, column 8, lines 11-13).

As per claim 40, Bartone et al disclose software that provides a construction of a transfer function for energy consumption of the energy-consuming site (e.g., data center's 22 system initiates commands that signal power reductions, via modules that reduce voltage to equipment or panels, column 6, lines 45-55).

As per claim 41, Bartone et al disclose the transfer function is a regression of energy consumption on other variables of the energy-consuming site (e.g., data center's 22 system initiates commands that signal power reductions, via modules that reduce voltage to equipment or panels, column 6, lines 45-55).

Claims 42-75 are rejected based upon the rejection of claims 1-3, 5-9, 12-21, 23-30, 32-34, 36, 40, 40, 41, and 41, respectively, since they are the method claims corresponding to the system claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Or et al (US 2002/0178047) disclose an energy management and corrective method.

-Smith et al (USPN 6785592) disclose optimizing energy procurement, demand, and supply.

-Packa et al (USPN 5717609) disclose an energy measurement and verification system.

-Pesko et al (USPN 6290140) disclose managing energy usage.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (571) 272-6726. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

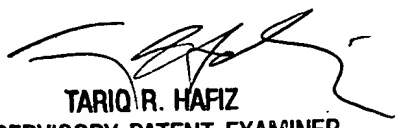
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



adb

September 29, 2005



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